

UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

Ecological Site Description

Site name: SEMI ARID COAST FOOTHILLS
Site number: R-273ZY033VI
Major Land Resource Area: 273 Semiarid Coastal Plains
Interstate correlation: NONE

Physiographic features:

This site occurs on floodplains, alluvial fans and marine terraces in the semiarid region. They formed in residuum, colluvium, and alluvium that weathered from volcanic and limestone bedrock. Elevation ranges from 0 to 150 feet.

Climatic features:

Frost-free period: 365 DAYS
Freeze-free period: 365 DAYS
Mean annual precipitation: 43.34 inches
Mean annual air temperature: 79.4°F
Mean annual soil temperature:
Monthly moisture and temperature distribution:

	Mean Precipitation (inches)	Percent Precipitation (%)	Mean Temperature (°F)
January	2.16	4.98	77
February	1.59	3.65	77
March	1.85	4.25	77
April	2.55	5.87	78
May	4.07	9.40	79
June	2.93	6.75	81
July	2.75	6.35	81
August	4.29	9.88	82
September	5.54	12.80	82
October	5.73	13.22	81
November	6.03	13.95	80
December	3.85	8.90	78
Mean annual	43.34		79.4°F

Other climatic features: A rainy season prevails from July to November and a pronounced dry season occurs during the remainder of the year. Hurricanes are most

likely to occur August through November, and are characterized by strong winds and torrential rains.

Associated water features: Small intermittent streams.

Elevation Aspect: 5 to 500 ft.

Percent Slope: 2 to 70

Soils: Soils of this site are very deep, somewhat poorly to well drained, moderately fine textured formed from volcanic material. They are neutral to calcareous and occur on nearly level to sloping terraces, foot slopes and near streams, rivers and drainage ways in the coastal plains. Permeability varies from moderately slow to moderate and the available water capacity from moderate to high.

Major Soil Taxonomic Units correlated to this site include:

Carib, CaA
Cinnamon Bay, CgC, CbB
Glynn, GyB, GyA, GyC
Hogensborg, HgA, HgB, HdC

Plant communities:

This site consists primarily of tufted perennial grasses that are drought tolerant with scattered large flattop trees. The site exists in the coastal foothills. Many introduced grasses are adapted to this site. These are highly palatable species which include guinea and buffel grass.

Major plant species composition: Grasses constitute approximately 86% of the composition, shrubs 6%, forbs 6% and trees about 2%.

Predominant plant community:

Grasses and Grasslikes

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
AXCO	Carpet				
BOPE4	Hurricane				
CEEC	Sandbur				
CHIN4	Chloris				
CYDA	Bermuda				
DAAE	Egyptian grass				
DIAN	Kleberg blue				
DISA	Crabgrass				

PECI	Buffel				
RHRE2	Natal grass				
SEGE	Knotroot bristlegrass				
SOHA	Johnson				
SPIN4	Droppsed				
URMA4	Guinea				

Forbs

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
CEPU5	Pea				
JAGO	Tautaba				
POOL	Portulaca				
SIAG	Sensitive plant				
STHA	Stylo				

Shrubs and Trees

Scientific Symbol	Common Name	Group	Pounds per Acre	Percent by Weight	Percent Allowed For group
ACFA	Acacia				
BUBU	Black olive				
BUSI	Turpentine				
CEPE2	Silk cotton				
CEPE2	Kapoc				
COAN11	Basora				
CROTA	Rattlebox				
CROTO	Croton				
GOHI	Cotton				
GUUL	West Indian Elm				
LELE10	Tan tan				
PIAC	Fustic				
PRJU	Mesquite				
TEST	Tecoma				
URLO2	Urena				

Ground Cover and Structure

	Height Above the Ground											
	Not applicable		6 to 12 inches		12 to 24 inches		24 to 60 inches		60 to 80 inches		180 to 240 inches	
	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover	% Ground cover	% Canopy cover
Trees											1	2
Shrubs							1	20				
Grasses and grasslikes			20	70								
Forbs			1	8								
Cryptogams												
Coarse fragments												
Bare ground												
Litter												

Transition Pathways: The native vegetation is generally replaced by such introduced species as guinea, buffel, kleberg and hurricane grass. These generally dominate the site when it is subjected to severe overgrazing. Guinea and buffel generally replaces native species when properly managed and provides a high level of forage production. However, if these species are severely grazed, the site will be subject to invasion by hurricane and kleberg and tan tan. If abusive grazing continues, kleberg will be replaced by a pure stand of hurricane and brushy/thorny species, croton, mesquite and aroma.

Total annual production: 10,000 lbs/ac normal year.

Plant Growth Curves:

Growth curve number: VI001

Growth curve name: VI PLANT GROWTH CURVE

Growth curve description: Native and naturalized grasslands.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
5	1	1	7	12	7	7	10	12	13	14	9

Animal Community:

This site is important several wildlife species. Major species using the site include:

Adelaide's warbler
Cattle egret
Helmeted guinea fowl
Lesser antillian pewee

Lizards
Mangose
Mangrove cuckoo
Northen mockingbird
Other rodents
Ovenbird
Pearly eyed thrasher
Peregrine Falco
Prairie warbler
Puerto Rican flycatcher
Puerto Rican nighthjar
Sparrow hawk
Turkey vulture
Yellow faced grassquit

Associated sites:

Similar sites:

Plant communities, production, and vigor of this site is similar enough to other sites in the region to cause a problem or concern mainly during the dry season.

Site documentation:

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Revised: 05/2002 E. Más, J. Lugo, S. Ríos

Supporting data for site development: Supporting data include clipping studies, and historical writing of the area. More documentation and study are needed to fully understand this site and the transitions that occur.

Sampling techniques:

SCS-Range 417

Type locality:

Field Offices: St. Croix

References:

USDA, NRCS. 1997. National Range and Pasture Handbook.

USDA, SCS. Soil Survey.

Site Approval:

This site has been reviewed and approved for use:

USDA NRCS Resource Conservationist

Date